



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,929	09/17/2003	Nischal Abrol	030142	6825
23596 7590 11/17/2008 QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121				
EXAMINER				
KARIKARI, KWASI				
ART UNIT		PAPER NUMBER		
2617				
NOTIFICATION DATE		DELIVERY MODE		
11/17/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com

kascanla@qualcomm.com

nanm@qualcomm.com

Office Action Summary

Application No.

10/665,929

Applicant(s)

ABROL ET AL.

Examiner

KWASI KARIKARI

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1.5-7.9-15.20.22.23.25.28 and 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1.5-7.9-15.20.22-23.25 and 28-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/02/2008 has been entered.

Response to Arguments

2. Applicant's arguments, filed on 10/02/2008 with respect to the pending claims in the remarks, have been considered but are moot in view of the new ground(s) of rejection necessitated by the new limitations added to claims 1,20 and 28. See the rejection below in the pending claims for relevant citations found in Madour and Bertrand disclosing the newly added limitations.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 5-6, 20, 22 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madour (US 20030053431 A1), (hereinafter Madour) in view of Bertrand et al. (U.S 6,876,640), (hereinafter Bertrand).

Regarding claims 1, 20 and 28, Madour discloses a wireless communication device/method/means (= terminal 205, see Fig. 2) comprising:

a connection table for storing one or more connection identifiers, wherein a connection identifier corresponds to a Packet Coordination Function (PCF) that has been previously visited by the wireless communication device (= terminal stores PZID of visited PZ, see Pars. 0005, 0008, 0028-29 and 0031-32);

a receiver for receiving a connection identifier (see Pars. 0032 and 0034);

a processor for delivering the received connection identifier to the connection table for storing when the received connection identifier is not contained in the connection table (see Pars. 0032 and 0034); and

a transmitter for sending a registration in response to the received connection identifier when the received connection identifier is not contained in the connection

table (see Pars. 0006-10, 0028-29, 0033-35 and 0037); but fails to disclose "a corresponding timer, wherein the processor removes a connection from the connection table in response to an expiration of the corresponding timer; wherein the processor resets the corresponding timer in response to activity on a correction corresponding to the connection identifier".

However, Bertrand which is an analogous art discloses "a corresponding timer, wherein the processor removes a connection from the connection table in response to an expiration of the corresponding timer; wherein the processor resets the corresponding timer in response to activity on a correction corresponding to the connection identifier"(see col. 9, lines 1-38).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Bertrand with the system of Madour for the benefit of achieving a system that reduces radio resource by preventing the creation and renegotiation of PPP session whenever mobile station moves different PDSN (see Bertrand, col. 3, lines 20-30).

Regarding **claim 5**, as recited in claim 3, Madour further discloses the wireless communication device wherein, the processor clears the connection table when a connection is received corresponding to a Packet Data Serving Node (PDSN) that is different from a PDSN corresponding to a previously stored connection (see Pars. 0032, 0034 and 0037).

Regarding **claim 6**, as recited in claim 3, Madour further discloses the wireless communication device wherein, the processor clears the connection table when a clear table message is received by the receiver (see Pars. 0032, 0034 and 0037).

Regarding **claim 22**, as recited in claim 20, Madour further discloses the method further comprising: receiving a clear table message; and clearing the connection table in response to the clear table message (see Pars. 0032, 0034 and 0037).

4. **Claims 7,9-15, 23, 25 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertrand in view of Madour (US 6,834,050 A1), (hereinafter Madour II).**

Regarding **claims 7, 23 and 29**, Bertrand discloses a Packet Data Serving Node (PDSN) /method, operable with a plurality of PCFs (RN 108) via a corresponding plurality of connections (112), each PCF operable to communicate with one or more wireless communication devices (102), the PDSN further operable with a network (118) for directing data for transmission to one or more wireless communication devices (see Fig. 1), comprising:

a connection table for storing a plurality of connection sets (= PPP register 126 could be located any where in system 100, see col. 5, lines 50-67 and col. 6, lines 10-20), each connection set comprising one or more connections associated with a wireless communication device (= R-P interface and PPP connection, see Fig. 1);

a processor (= inherent feature of RN 108) for selecting a connection from the one or more connections in a connection set associated with a wireless communication device for which data is directed from the network (= complete negotiation of PPP context of PPP session, see col. 1, lines 65-66 and col. 8, lines 12-59); and

a buffer for receiving data from the network that is designated for delivery to a wireless communication device, storing the received data until the wireless communication device is located on one of the connections in the connection set and transmitting the stored data on the selected connection to the wireless communication device (see col. 1, line 65-67; col. 2, lines 49- col. 3, line 43); but fails to teach wherein a first timer in the PDSN and a second timer in the wireless communication device correspond to each of the connections and wherein the first timer is set to expire after the second timer.

However, Madour II teaches "wherein a first timer in the PDSN and a second timer in the wireless communication device correspond to each of the connections and wherein the first timer is set to expire after the second timer (see col. 3, lines 37-54 and col. 6, lines 27-50).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Madour II with the system of Bertrand for the benefit of achieving a system that includes hash function of system selection (see col. 4, lines 60-65).

Regarding **claim 9**, as recited in claim 7, Bertrand discloses the Packet Data Serving Node (PDSN), wherein an active connection identifier is stored in the connection table to identify zero or one active connection for each wireless communication device (see col. 6, lines 43-64).

Regarding **claim 10**, as recited in claim 9, Bertrand discloses the Packet Data Serving Node (PDSN), wherein the processor selects all of the connections associated with a wireless communication device for transmission to the wireless communication device when no connection for the wireless communication device is identified as active (= creation of new session, see col. 6, lines 43-64).

Regarding **claim 11**, as recited in claim 9, Bertrand discloses the Packet Data Serving Node (PDSN), wherein the processor selects a subset of the connections associated with a wireless communication device for transmission to the wireless communication device when no connection for the wireless communication device is identified as active (see col. 6, lines 43-64).

Regarding **claim 12**, as recited in claim 9, Bertrand discloses the Packet Data Serving Node (PDSN), wherein the processor selects the most recent active connection from the connections associated with a wireless communication device for transmission to the wireless communication device when no connection for the wireless communication

device is identified as active (= previous PPP context are used, see col. 7, lines 1-19).

Regarding **claim 13**, as recited in claim 9, Bertrand discloses the Packet Data Serving Node (PDSN), wherein the processor selects one or more connections randomly from the connections associated with a wireless communication device for transmission to the wireless communication device when no connection for the wireless communication device is identified as active (see col. 7, line 57- col. 8, lines 34).

Regarding **claim 14**, as recited in claim 7, Bertrand discloses the Packet Data Serving Node (PDSN), further comprising a plurality of timers corresponding to the plurality of stored connections, wherein the processor removes a connection from the connection table upon expiration of one of the plurality of timers associated with the connection (col. 7, lines 32-56).

Regarding **claim 15**, as recited in claim 14, Bertrand discloses the Packet Data Serving Node (PDSN), wherein the processor resets one of the plurality of timers in response to an activity indicator associated with the mobile station on the corresponding connection (see col. 6, lines 43- 64).

Regarding **claim 25**, as recited in claim 23, Bertrand fails to disclose "maintaining a plurality of timers corresponding to the plurality of stored connections and removing a

connection from the connection table upon expiration of one of the plurality of timers associated with the connection" (col. 7, lines 32-56).

However, Madour II teaches "maintaining a plurality of timers corresponding to the plurality of stored connections and removing a connection from the connection table upon expiration of one of the plurality of timers associated with the connection" (see col. 3, lines 37-54 and col. 6, lines 27-50).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Madour II with the system of Bertrand for the benefit of achieving a system that includes hash function of system selection (see col. 4, lines 60-65).

CONCLUSION

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. SEE MPEP 2141.02 [R-5] VI. PRIOR ART MUST BE CONSIDERED IN ITS ENTIRETY, INCLUDING DISCLOSURES THAT TEACH AWAY FROM THE CLAIMS: A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984) In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004). >See also MPEP §2123.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwasi Karikari whose telephone number is 571-272-8566. The examiner can normally be reached on M-T (9am - 7pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8566. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/KWASI KARIKARI/
Examiner, Art Unit 2617

/Charles N. Appiah/
Supervisory Patent Examiner, Art Unit 2617